

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-184

Relating to Certification of New Heavy-Duty Engines and Vehicles

ISUZU MOTORS, LTD.

Pursuant to the authority vested in the Air Resources Board at Sections 43100, 43101, and 43102 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned at Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-9; and

IT IS ORDERED AND RESOLVED: That the following 2001 model-year Isuzu Motors, Ltd. diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle-weight-rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

<u>Engine Family</u>	<u>Displacement</u> <u>Liters</u> <u>Cubic Inches</u>	<u>Exhaust Emission Control</u> <u>Systems and Special Features</u>
1SZXH07.84RA	7.8 476	Turbocharger Charge Air Cooler Electronic Control Module

The engine models and codes are listed on attachments.

BE IT ORDERED AND RESOLVED: That the following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour under the Federal Test Procedure ("FTP") for Heavy-Duty Diesel Engines (Title 13, California Code of Regulations, Section 1956.8):

	<u>Total</u> <u>Hydrocarbons</u>	<u>Carbon</u> <u>Monoxide</u>	<u>Nitrogen</u> <u>Oxides</u>	<u>Particulate</u> <u>Matter</u>
"FTP"	1.3	15.5	4.0	0.10

BE IT FURTHER RESOLVED: That the following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour:

	<u>Total</u> <u>Hydrocarbons</u>	<u>Carbon</u> <u>Monoxide</u>	<u>Nitrogen</u> <u>Oxides</u>	<u>Particulate</u> <u>Matter</u>
"FTP"	0.2	1.7	3.7	0.09

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2035 et seq.).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 12th day of January 2000.



R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

EO: A-20-184

Manufacturer: Isuzu Motors Limited
 Engine category: On-highway HDDE
 EPA Engine Family: 1SZXH07.84RA
 Mfr Family Name: N/A
 Process Code: New Submission

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr) @ peak torque	9.Emission Control Device Per SAE J1930
784RA-1	6HK1XN	200Hp@2400	96.4@2400	80.3@2400	452@1500	88.2@1500	44.1@1500	TC ECM, CAC
784RA-2	6HK1XS	230Hp@2400	112.7@2400	93.7@2400	517@1500	100.4@1500	50.2@1500	TC, ECM, CAC